United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Energy and Power, Committee on Commerce, House of Representatives

For Release on Delivery Expected at 10:30 a.m. EST Wednesday March 22, 2000

DEPARTMENT OF ENERGY

Views on Proposed Civil Penalties, Security Oversight, and External Safety Regulation Legislation

Statement of Gary L. Jones, Associate Director, Energy, Resources, and Science Issues, Resources, Community, and Economic Development Division



DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited



20000324 088

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to provide our views on three bills designed to improve worker and nuclear facility safety and health as well as to enhance security for the Department of Energy (DOE). Our testimony is based on our past work on safety, health, and security issues on a wide variety of DOE programs and activities. Let me summarize our views on the three bills:

- H.R. 3383 would amend the Atomic Energy Act by eliminating the exemption that
 currently allows certain nonprofit contractors to avoid paying civil penalties if they
 violate DOE's nuclear safety rules. Last year, we reported and testified on a number
 of problems with DOE's enforcement of its nuclear safety regulations. We suggested
 that the Congress consider eliminating both the statutory and administrative
 exemptions from paying civil penalties for violations of nuclear safety rules. This bill
 directly addresses our concerns.
- H.R. 3906 would legislatively establish an office of independent security oversight within DOE that reports directly to the Secretary. We believe that legislatively establishing an office, independent from line management, that oversees safeguards and security across the Department and reports to the Secretary would insulate it from organizational change and programmatic conflicts. Since May 1999, DOE's security oversight office has reported to the Secretary. However, prior to May 1999, it was several layers down in the organization and, as a result, oversight findings were not always raised to top management. The legislation would also require an annual report to the Congress from that office on the status of its findings. Requiring an

¹See Department of Energy: DOE's Nuclear Safety Enforcement Program Should Be Strengthened, GAO/RCED-99-146, Jun. 10, 1999). Nuclear Security: Improvements Needed in DOE's Safeguards and Security Oversight, (GAO/RCED-00-62, Feb. 24, 2000). Department of Energy: Uncertain Future for External Regulation of Worker and Nuclear Facility Safety, (GAO/T-RCED-99-255, Jul. 22, 1999). Department of Energy: Clear Strategy on External Regulation Needed for Worker and Nuclear Facility Safety, (GAO/T-RCED-98-163, May 21, 1998).

annual report would make the office's findings more visible and help to ensure prompt corrective actions are taken.

• H.R. 3907 would eliminate self-regulation of health and safety activities at DOE by authorizing the Nuclear Regulatory Commission (NRC) to regulate and enforce nuclear safety and the Occupational Safety and Health Administration (OSHA) to regulate and enforce occupational health and safety for all DOE facilities. This bill provides a sound basis for continuing the process of moving DOE in the direction of external regulation. However, the time frame allowed in the bill for the transition to full external regulation may not be achievable. NRC and OSHA have experience with some DOE facilities--smaller, less complex facilities and nondefense research laboratories. The transition to NRC and OSHA regulation of these facilities could be achieved relatively quickly. However, issues associated with regulating larger defense facilities are more complex, such as the need for experience with unique activities at weapons facilities, and would take longer to evaluate and may require special consideration.

Mr. Chairman, while all three bills have the potential to improve some aspects of health, safety, and security at DOE facilities, legislation can only take change so far. In the final analysis, it will require a long-term commitment by DOE, and quite frankly, DOE has not demonstrated the will nor does it have the culture in place to make lasting changes. DOE needs to focus on aspects of its culture that are barriers to effectively carrying out its missions in a safe, environmentally sound, and secure way. Over the years, our work has noted culture barriers such as a complicated, dysfunctional organizational structure; an unclear chain of command; poor accountability for program management; weak oversight of contractors; lack of technically skilled staff; and resistance to change.

DOE has made changes and has activities under way that address some of these issues. However, it must continue to look at human capital issues, such as hiring and training to improve the skills of its employees, the performance measures and incentives systems for contractors and federal employees to ensure that they reward the correct behaviors,

and clear definition of roles and responsibilities to eliminate duplication and inefficiencies. Without identifying and focusing on the barriers to change, DOE will not be able to break out of the culture or mindset that permeates it. Therefore, even with the changes brought about by these legislative proposals, problems inherent in DOE may continue.

Background

Since its creation in 1977, DOE has conducted technically complex and hazardous activities at its facilities across the country. These activities include developing, producing, maintaining, storing, and dismantling nuclear weapons; managing nuclear fuel storage and disposal sites; operating nuclear reactors; performing research and development to enhance energy efficiency and to develop innovative nuclear, renewable, and other energy sources; and cleaning up environmental contamination from its past weapons production. Besides being potentially dangerous, some of these activities are highly classified and require sophisticated security measures. However, in conducting these activities, DOE has a long history of safety, managerial and security problems.

DOE is essentially exempt from regulation by NRC for nuclear safety and by OSHA for worker protection. These exemptions originated from concerns about national security that characterized DOE's historical role in nuclear weapons production. The facilities that this legislation would subject to external regulation are substantial. DOE maintains 3,500 nuclear facilities at 34 sites in 13 states, covering, in all, more than 85 million square feet of building space.

Civil Penalties for Nonprofit Contractors

H.R. 3383 would amend the Atomic Energy Act by eliminating the exemption that allows certain contractors to avoid paying civil penalties if they violate DOE's nuclear safety rules. The Congress first authorized civil monetary penalties for violations of nuclear safety rules in 1988. This gave DOE the authority to impose civil monetary penalties on its contractors, and on their subcontractors and suppliers, for violating enforceable

nuclear safety rules. However, for certain contractors, the Congress provided an exemption from having to pay the monetary penalties, primarily because the contractors operating DOE laboratories at the time received no fees in addition to their reimbursable costs and, therefore, had no contract-generated funds available to pay any penalties assessed. There was concern that these contractors might leave the research field rather than put the assets of their organizations at risk if they were subject to paying the monetary penalties. If DOE identifies violations of nuclear safety rules at any of the seven contractors and laboratories specifically named in the law, or their subcontractors and suppliers, DOE cannot collect the civil monetary penalty.

The exemption from civil penalties has been extended to institutions that, like other contractors in the business of handling nuclear materials, receive financial protection or indemnification from the damages to people and property that may be harmed in a nuclear accident. The Secretary also was given the authority to determine whether other contractors that are nonprofit educational institutions should receive a similar exemption. In 1993, DOE specified by rule that all nonprofit educational institutions would receive an automatic exemption from paying the penalties.

In a March 1999 report to the Congress concerning the reauthorization of the Price Anderson Act, DOE argued that the exemption for named contractors and nonprofit educational institutions should be continued.² Our analysis of DOE's reasoning, however, raised several questions about the merits of continuing the exemption:

DOE argued that universities and other nonprofit contractors working at DOE
facilities would be unwilling to put their assets at risk for contract-related expenses
such as civil penalties. However, nearly all of the contractors that manage and
operate DOE facilities now have the opportunity to earn a fee. This fee, which is in
addition to reimbursed costs, is used by the nonprofit contractors to cover certain

²The Price Anderson Act established a source of funds to compensate personal injury and property damage from a nuclear accident and limits liability of private industry for such accidents.

nonreimbursable contract costs and to conduct other laboratory research. The fee could also be used to pay civil penalties if they were imposed on the contractor.

- DOE said that contract provisions are a better mechanism than civil penalties for holding nonprofit contractors accountable for safe nuclear practices. However, DOE has not taken full advantage of the existing contracting mechanisms to emphasize nuclear safety. For example, at the Lawrence Livermore National Laboratory in California, DOE's main contractor—the University of California—received 96 percent of its \$6.4 million available performance fee in fiscal year 1998, even though it had significant nuclear safety deficiencies resulting in enforcement actions. At best, only about 4 percent of its performance fee for 1999 was at risk if it did not perform satisfactorily in the health and safety area.
- DOE said that its current approach of exempting nonprofit institutions is consistent with NRC's treatment of nonprofit organizations because DOE issues notices of violation to nonprofit contractors without collecting penalties but can apply financial incentives or disincentives through the contract. However, NRC can and does impose monetary penalties for violations of safety requirements, without regard to the profit-making status of the organization. NRC sets lower penalty amounts for nonprofit organizations than for-profit organizations. The Secretary could do the same, but does not currently take this approach. Furthermore, both NRC and other regulatory agencies have assessed and collected penalties or additional administrative costs from some of the same organizations that DOE exempts from payment. For example, the state of California assessed and collected \$88,000 in "administrative costs" from the University of California for violating state environmental laws at the Lawrence Livermore and Lawrence Berkeley National Laboratories.

Our June 1999 report on DOE's nuclear safety enforcement program recommended that the Secretary of Energy eliminate the administrative exemption from paying civil penalties for violations of nuclear safety rules that DOE granted to nonprofit educational

institutions. The Department did not implement the recommendation, instead commenting that the issue of exemption from civil penalties was ultimately one for the Congress to decide. We also suggested that the Congress consider eliminating both the statutory and administrative exemptions from paying civil penalties for violating nuclear safety rules. H.R. 3383 directly addresses our recommendation.

Independent Security Oversight

H.R. 3906 would legislatively establish an independent security oversight office within DOE that reports directly to the Secretary of Energy. We believe that legislatively establishing an office, independent from line management, that oversees safeguards and security across the Department would insulate it from organizational change and programmatic conflicts. It would also provide the office with the visibility in the organization and the authority it needs to ensure that security problems it identifies are corrected. Since May 1999, DOE's independent security office has reported to the Secretary. However, the director of the independent security oversight office has not always reported to the Secretary. Prior to May 1999, the independent security oversight office reported to the Office of Oversight, which in turn reported to the Assistant Secretary for Environment, Safety, and Health, who reported to the Secretary. At one time, the oversight office was organizationally placed in Defense Programs, a linemanagement program office. As a result of these organizational placements, oversight findings and recommendations were not always raised to top DOE management and were sometimes ignored by the contractors operating DOE's facilities.

The bill also proposes, among other things, that the independent security oversight office conduct evaluations every 18 months and conduct follow-up reviews to ensure that corrective actions for security problems are effective. These provisions of the bill focus on several issues discussed in our February 2000 report on security oversight. For example, our report disclosed that during the mid-1990s, as many as 3 years elapsed between the independent security oversight office's inspections at DOE's nuclear weapons laboratories. In addition, we recommended that the oversight office work with

the laboratories in developing corrective actions to ensure that security problems identified during its inspections were properly corrected. In recent months, the independent security oversight office has taken actions on these issues. However, in the past, the emphasis on security within DOE has varied greatly, and recent improvements may not be permanent fixes. Required periodic evaluations, follow-up reviews, and the annual report to the Congress on the status of security at DOE facilities, as would be required under H.R. 3906, would help to prevent future backsliding.

External Regulation of DOE Facilities

H.R. 3907 would authorize NRC to regulate and enforce nuclear safety and OSHA to regulate and enforce occupational health and safety at DOE facilities. The bill would require that such regulation be effective by October 1, 2001. By placing DOE facilities under NRC and OSHA jurisdiction, the bill would continue the process of moving DOE in the direction of external regulation.

The process of eliminating self-regulation began in 1984 when DOE facilities first came under federal environmental laws that are carried out and enforced by the Environmental Protection Agency and the states. In addition, NRC has worked with DOE to license, certify, and consult on many different DOE facilities. For example, NRC granted a license to DOE for operating the TMI-2 Independent Spent Fuel Debris Facility at the Department's Idaho National Engineering and Environmental Laboratory. It is also conducting prelicensing consultations with DOE in other areas, including the high-level waste repository at Yucca Mountain, Nevada, and a proposed facility for making mixed-oxide fuel. NRC and OSHA have also conducted simulated inspections at DOE facilities during recent pilot projects. Aside from these individual cases, the vast majority of DOE's facilities are not regulated for health and safety by independent regulators.

We, along with others, have often reported on weaknesses in DOE's self-regulation of the environmental, safety, and health responsibilities at its facilities. These weaknesses prompted then-Secretary of Energy Hazel O'Leary to seek external regulation for worker

safety in 1993. In 1994, legislation was proposed and hearings were held on external regulation of DOE nuclear safety. In 1995, DOE created an advisory committee that concluded, "Widespread environmental contamination at DOE facilities and the immense costs associated with their cleanup provide clear evidence that self-regulation has failed." In 1996, a subsequent DOE working group of senior managers concluded that external regulation could improve safety, eliminate the inherent conflict of interest from self-regulation, gain consistency with current domestic and international safety management practices, and improve credibility and public trust. The advisers recommended that safety and health at DOE facilities be externally regulated.

In 1997, then-Secretary Frederico Peña took a more cautious approach to external regulation by launching a pilot program with NRC and OSHA. The pilot program was limited to DOE's nondefense facilities. The purpose of the pilot program was to test regulatory approaches and gain insight about the costs of external regulation based on actual experience. The pilot program began in January 1998 at the Lawrence Berkeley National Laboratory in California and was completed in June 1998. (OSHA completed an earlier pilot at the Argonne National Laboratory in Illinois in 1996.) The other NRC pilot program facilities were at Oak Ridge in Tennessee and Savannah River in South Carolina. The results of the pilot program, as well as the extensive interactions between DOE, NRC, and OSHA over the years, show that external regulation offers many potential benefits, and that external regulators have the flexibility to adjust to the unique conditions at DOE facilities.

The current Secretary believes external regulation is not worth pursuing, contending that costs would likely outweigh the value of external regulation. His position contrasts sharply with DOE's previous positions promoting external regulation. His position also conflicts with the Department's own pilot program results and is inconsistent with conclusions reached by NRC and OSHA. The results of the pilot program and the extensive practical experience gained with NRC and OSHA show that external regulation

³See *Improving Regulation of Safety at DOE Nuclear Facilities*, Advisory Committee on External Regulation of Department of Energy Nuclear Safety (Dec. 22, 1995).

for the class of facilities studied improves safety and accountability and is not likely to be prohibitively expensive.

While the pilot program revealed no major barriers to regulating the class of DOE facilities studied, none of the pilot sites contained defense facilities. The pilot did not include DOE's three largest laboratories—Lawrence Livermore, Los Alamos, and Sandia—which operate significant defense facilities. DOE's defense facilities are far more complex than the pilot sites and would likely require more time to study issues such as the need to maintain security, regulatory costs, resource and skill needs, and transition methods. For the much simpler pilot sites, nearly a year was spent planning, conducting and reporting on the pilot results. DOE's Working Group on External Regulation recommended several years of experience be gained before bringing in defense sites under outside regulatory control. Also, complicating any transition to outside regulatory control is the examination of the role of the Defense Nuclear Facilities Safety Board, which currently oversees nuclear safety at DOE's facilities.

Given these complexities, we believe the October 1, 2001, start up schedule contained in H.R. 3907 for full implementation of external regulation may not be achievable for DOE's defense facilities. Transitioning to NRC and OSHA regulation of classes of DOE facilities in which experience has already been gained, such as nondefense research laboratories, seems more workable. Then, phasing in NRC and OSHA regulation of DOE defense facilities could occur over a longer period of time.

_ _ _ .

Mr. Chairman, as I discussed initially, all three bills have the potential to improve some aspect of health, safety, and security at DOE facilities. However, legislation can only take change so far. In the final analysis, it will require a long-term commitment by DOE. This concludes my testimony. We would be happy to respond to any questions that you or Members of the Subcommittee may have.

Orders by Internet

For information on how to access GAO reports on the Internet, send an e-mail message with "info" in the body to

info@www.gao.gov

or visit GAO's World Wide Web home page at

http://www.gao.gov

To Report Fraud, Waste, and Abuse in Federal Programs

Web site: http://www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: 1-800-424-5454